

Summary of Changes: Equations Utilized in Conjunction with ISM02.1

November 14, 2013

The following Summary of Changes highlights the modifications implemented in the “Equations Utilized in Conjunction with ISM02.1” document compared to the May 13, 2013 document.

Introduction – Paragraph 3:

For each analytical method in Exhibit D of the SOW (ICP-AES, ICP-MS, Mercury, and Cyanide), the equations are reproduced in the following sections with the same equation number, title, and terms that appear in the SOW. For non-numbered equations, the SOW Section number is used to identify the equation. Following the equation, each variable is defined using terminology consistent with the SEDD.

Equations for Exhibit D – ICP-AES:

Section 9.3.4.3 ICAL Percent Difference

$$\%D = \frac{\text{Found (ICAL)} - \text{True (ICAL)}}{\text{True (ICAL)}} \times 100$$

where,

$\%D$ = Analyte/PercentDifference.

Found (ICAL) = Reported Analyte/Result (µg/L).

True (ICAL) = Reported Analyte/ExpectedResult (µg/L).

EQ. 6 Aqueous/Water and TCLP/SPLP Leachate Sample Concentration

“Leachates” has been updated to “TCLP leachates” in the Note below the equation for Aqueous/Water and TCLP/SPLP Leachate Sample Concentration calculation.

EQ. 10 Calculation of Hardness (Total) in Aqueous/Water Samples

The “Conc. Ca” and “Conc. Mg” terms in the key below the equation for the Calculation Hardness (Total) in Aqueous/Water Samples have been updated to the following:

Conc. Ca (mg/L) = ReportedResult/Result for Calcium (µg/L) ÷ 1000.

Conc. Mg (mg/L) = ReportedResult/Result for Magnesium (µg/L) ÷ 1000.

Equations for Exhibit D – ICP-MS:

Section 9.4.4.3 ICAL Percent Difference

$$\%D = \frac{\text{Found (ICAL)} - \text{True (ICAL)}}{\text{True (ICAL)}} \times 100$$

where,

$$\begin{aligned}\%D &= \text{Analyte/PercentDifference.} \\ \text{Found (ICAL)} &= \text{Reported Analyte/Result } (\mu\text{g/L}). \\ \text{True (ICAL)} &= \text{Reported Analyte/ExpectedResult } (\mu\text{g/L}).\end{aligned}$$

Equations for Exhibit D – Mercury:

Section 9.3.4.3 ICAL Percent Difference

$$\%D = \frac{\text{Found (ICAL)} - \text{True (ICAL)}}{\text{True (ICAL)}} \times 100$$

where,

$$\begin{aligned}\%D &= \text{Analyte/PercentDifference.} \\ \text{Found (ICAL)} &= \text{Reported Analyte/Result } (\mu\text{g/L}). \\ \text{True (ICAL)} &= \text{Reported Analyte/ExpectedResult } (\mu\text{g/L}).\end{aligned}$$

EQ. 3 Aqueous/Water and TCLP/SPLP Leachate Sample Concentration

“Leachates” has been updated to “TCLP leachates” in the Note below the equation for Aqueous/Water and TCLP/SPLP Leachate Sample Concentration calculation.

Equations for Exhibit D - Cyanide:

Section 9.3.4.3 ICAL Percent Difference

$$\%D = \frac{\text{Found (ICAL)} - \text{True (ICAL)}}{\text{True (ICAL)}} \times 100$$

where,

$$\begin{aligned}\%D &= \text{Analyte/PercentDifference.} \\ \text{Found (ICAL)} &= \text{Reported Analyte/Result } (\mu\text{g/L}). \\ \text{True (ICAL)} &= \text{Reported Analyte/ExpectedResult } (\mu\text{g/L}).\end{aligned}$$